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TITLE: Telemedicine-Based Burn Research Initiative:  
Longitudinal Outcomes of Patients

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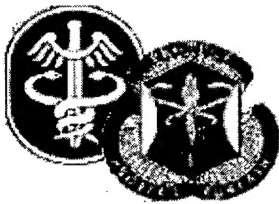
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## Mid-Term Report



PROPOSAL NO.: 2002011113

**TITLE: Telemedicine-Based Burn Research Initiative: Longitudinal Outcomes of Patients**

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### ACCOMPLISHMENTS

As of 19 December, the research team has submitted the research proposal to the Brooke Army Medical Center Institutional Review Board (IRB). The IRB approved the proposal. Consent forms created in English were then translated into Spanish. Instrument packets were created in English and translated into Spanish by a certified translator. All instruments were professionally printed.

The consultant for the project was hired and telemedicine equipment was evaluated by the consultant based on clinical requirements defined by the research team. The Starview 2000 ProSeries II Videophone was selected for this study and 25 units in hardened carry cases were purchased from the vendor. These telemedicine units were configured for ease of patient use. All units have arrived and are in the process of being tested before being given to patients.

The research assistant (RA) was hired and will begin work full-time on the project starting Jan 5, 2004. He worked part-time during the initial phase of this study in order to be trained by the consultant and the research team in the use of the burn study instruments, the telemedicine equipment, and the Telemedicine Perceptions Questionnaire. The RA created an Excel spreadsheet to track all equipment by serial number.

The telemedicine consultant and the associate investigator traveled to San Antonio, where the research team received training concerning the Videophone equipment. A staff handbook and patient handbook are in the final stages of being written for use in the study. An excel spreadsheet was created to manage distribution of equipment to patients. The qualitative questions for the research team were created and agreed upon. Additionally, permission to use the Telemedicine Perceptions Questionnaire (TMPQ) was obtained. The TMPQ was typed onto a specific data collection sheet for ease of use by the research team and for proper accountability in the study.

Patient recruitment will begin during the second week of January 2004.

PI Evaluation: Project Accomplishments Match Proposal

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## PROBLEMS/ISSUES

The Videophone does not work as well in a PBX switchboard environment (dialing 9 or 99 to get an outside line). Optimum usage occurs via a direct, analog phone line. The research team is currently trouble shooting this problem by evaluating the use of a PBX adapter or getting a direct line in the research office at the medical treatment facility.

If the research team requires PBX adapter equipment, an additional \$500 \$1,000 may be needed for this purchase (if a direct line cannot be installed at the medical center).

**PI's Evaluation:** Project Accomplishments Close to Proposal  
Project encountered no significant problems/issues

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## Second Half Project LifeCycle

The research team will begin patient recruitment, data collection and data entry during the next half of the project. Because this study is longitudinal in nature, final patient based results will not be available until Summer 2006, when all longitudinal data have been collected and entered. However, patient and research team acceptability of the technology and performance of the technology can be reported. We will need additional funds for the analysis of the qualitative data from this project if we continue to collect these data for the duration of the longitudinal project. The team is currently attempting to ascertain the costs for these services from the consultant. Currently, the research team plans to submit a proposal next year to request funds to continue this telemedicine study in a longitudinal fashion.

**PI's Evaluation:** Project Plan is according to Proposal.

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## Deliverable Update

Efficacy of success will be measured through use of the TMP and the qualitative data from the research team members working with the telemedicine equipment and the patients. Over the course of the longitudinal study, burn patients' needs and rehabilitative outcomes will be measured by the quantitative research instruments identified in the proposal.

The research team envisions tremendous AMEDD wide applicability. As more soldiers from Operation Iraqi Freedom are treated in the burn unit, the research team is hopeful that we can accrue many of these soldiers into the study. If the use of telemedicine equipment is useful for research data collection from a mobile patient/soldier population, it could become a valuable way of conducting longitudinal research with patients/soldiers who are not in the immediate area of the research team. The ability to take snapshots of wounds, healing burns, and special devices used by patients over time is an added benefit

to the research team. Additionally, the research team believes this technology may provide more of a "human connection" with subjects because they can see the research team members and we can see them.

PI's Evaluation: Deliverable is on schedule, per Proposal

## Expenditures

Element of Resource (EOR)	3Q FY 01	4Q FY 01
	Apr 1 - May 31	Jun 1 - Sep 30
Travel 2100	0.00	500.00
Shipping 2200	0.00	0.00
Rent & Communications 2200	0.00	0.00
Contract for Services 2500	0.00	38,509.03
Supplies 2600	0.00	0.00
Equipment 3100	0.00	80,100.00

## Financial Narrative

Travel funds were spent for the telemedicine consultant to travel to San Antonio for the purposes of meeting with the research team and providing equipment testing and training.

Services were contracted from the telemedicine consultant for her time to: review possible types of equipment to be used in the study, make recommendations to the team about

equipment that could be easily used by the team and the patients, dialogue with the equipment vendor about configuration possibilities, order the equipment and develop the beginnings of the patient and staff handbooks regarding the equipment.

Services also were contracted by hiring a research assistant to ensure accountability of the equipment, enroll patients, train patients with the equipment they will take home, administer the research instruments, enter data, and maintain longitudinal rapport with enrolled patients.

All telemedicine units to be used in the study were purchased and they arrived at the research site. Equipment is currently being tested and hand-receipted.

The research team will not be able to anticipate the costs of adopting the system until completion of the project because user acceptability evaluations play a major role in making this determination.

PI's Evaluation: Budget and Resources in line with Proposal

\* \* \* END OF REPORT \* \* \*

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